

FIG. 1

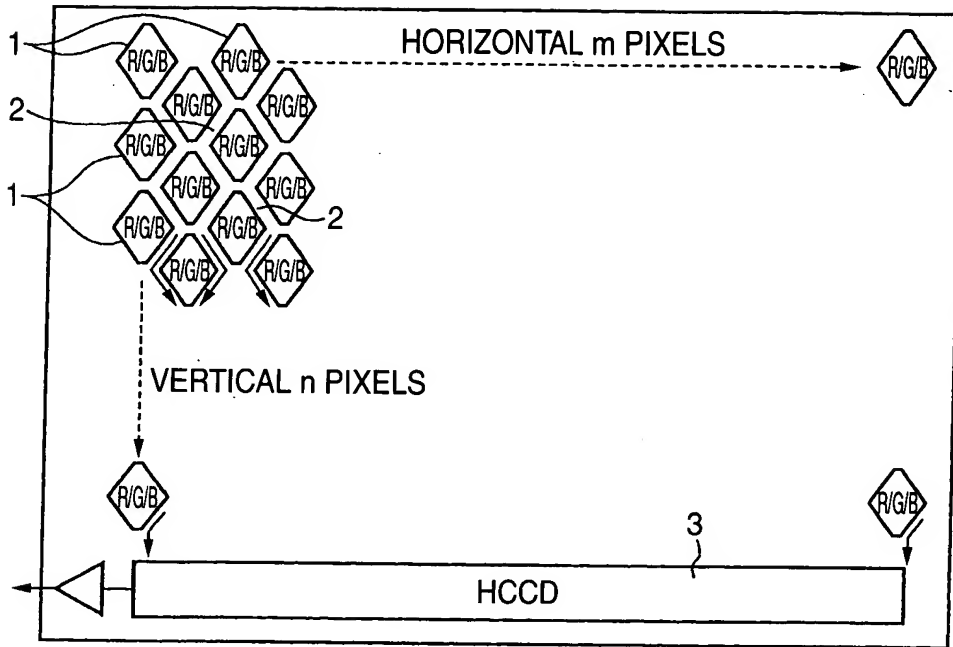
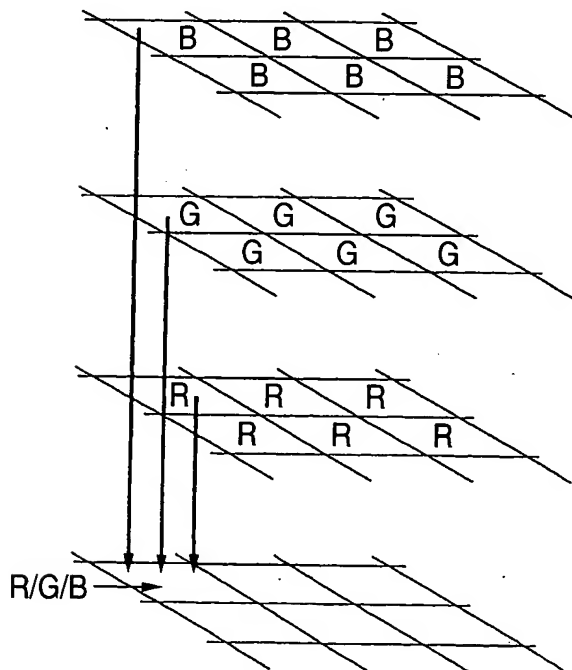


FIG. 2



INFORMATION OBTAINED BY
FIRST CHARGE TRANSFER
INFORMATION OF
mxn PIXELS ABOUT B

INFORMATION OBTAINED BY
SECOND CHARGE TRANSFER
INFORMATION OF
mxn PIXELS ABOUT G

INFORMATION OBTAINED BY
THIRD CHARGE TRANSFER
INFORMATION OF
mxn PIXELS ABOUT R

FINALLY-OBTAINED
IMAGE INFORMATION
INFORMATION OF
(B, G, R)mxn PIXELS

FIG. 3

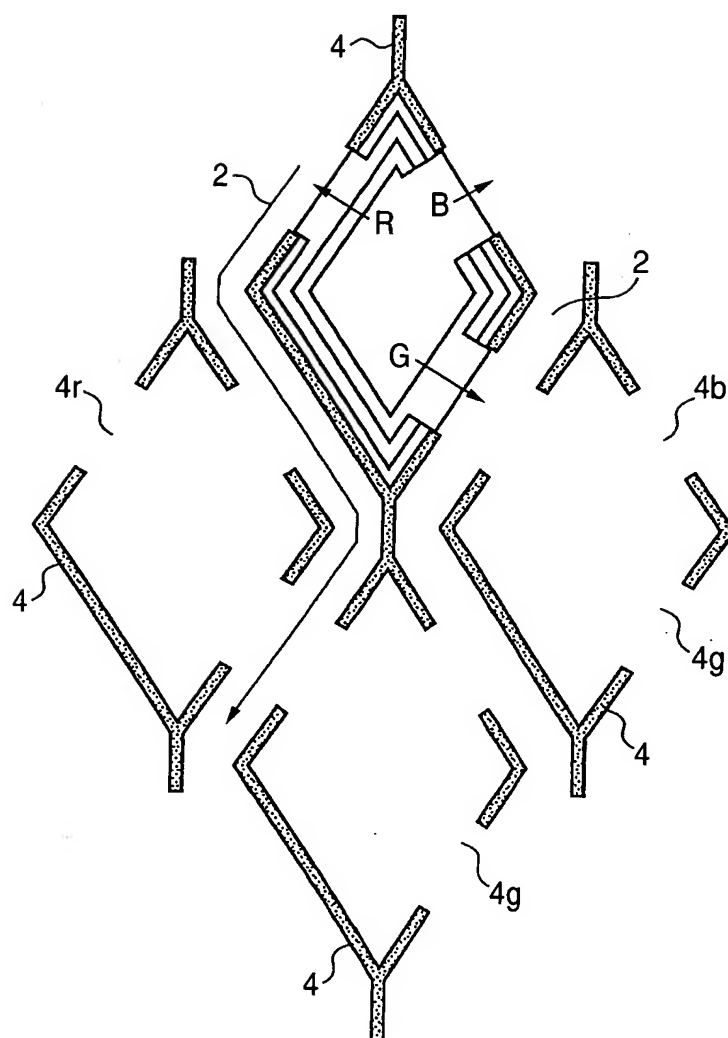


FIG. 4

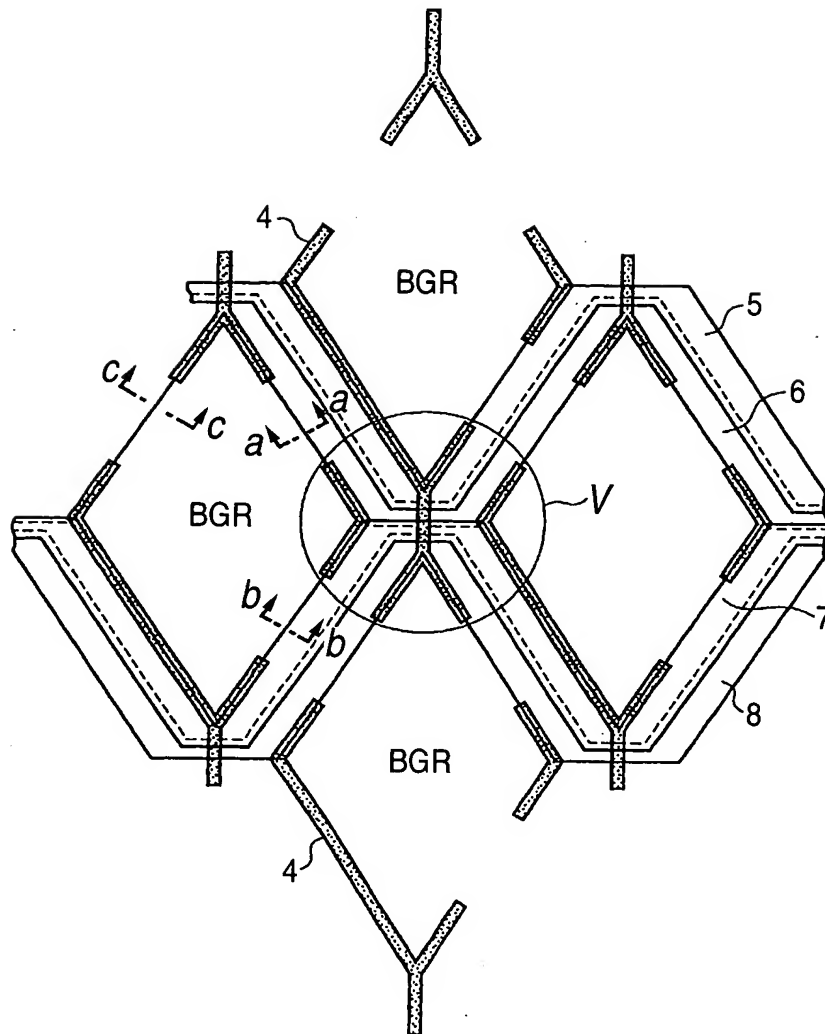


FIG. 5

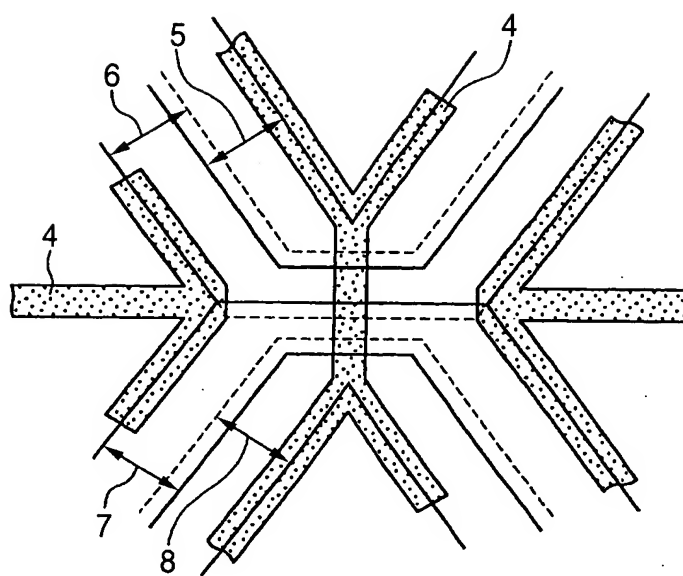
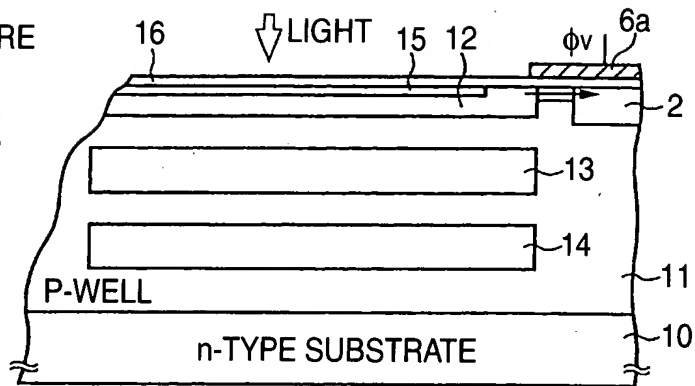
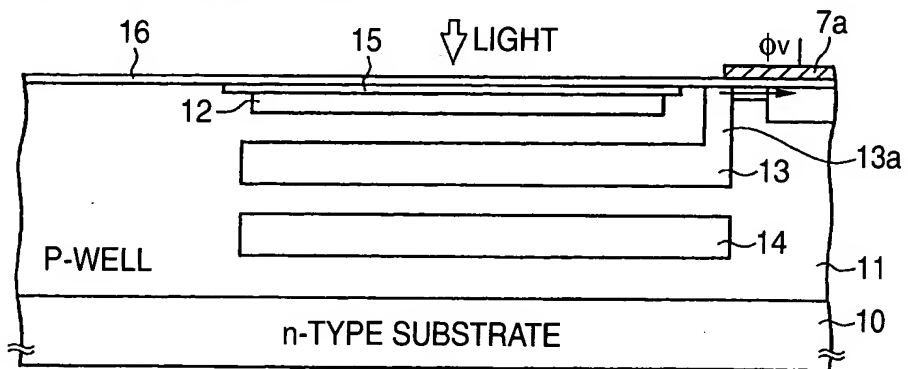


FIG. 6A

CROSS-SECTIONAL STRUCTURE
OF SECTION FOR READING
ELECTRIC CHARGES FROM
PHOTODIODE ASSIGNED TO
B WAVELENGTH

**FIG. 6B**

CROSS-SECTIONAL STRUCTURE OF SECTION
FOR READING ELECTRIC CHARGES FROM
PHOTODIODE ASSIGNED TO G WAVELENGTH

**FIG. 6C**

CROSS-SECTIONAL STRUCTURE OF SECTION
FOR READING ELECTRIC CHARGES FROM
PHOTODIODE ASSIGNED TO R WAVELENGTH

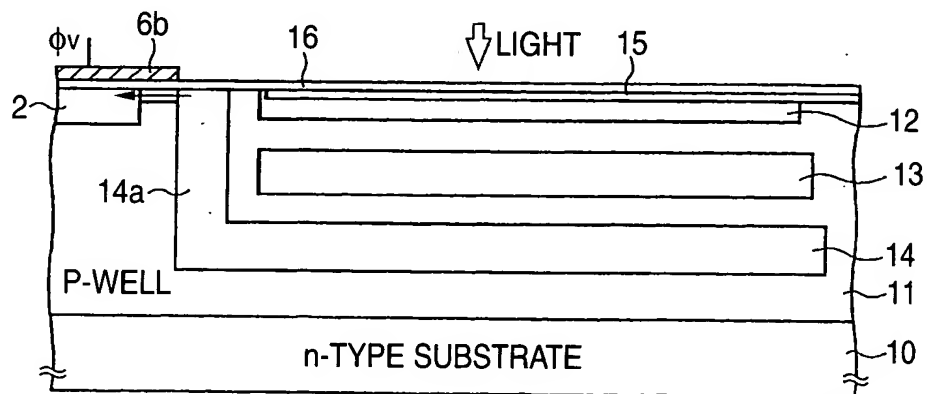


FIG. 7

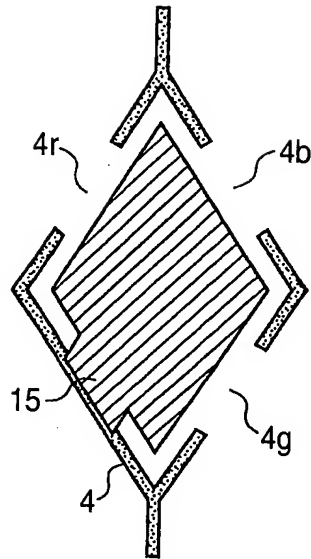
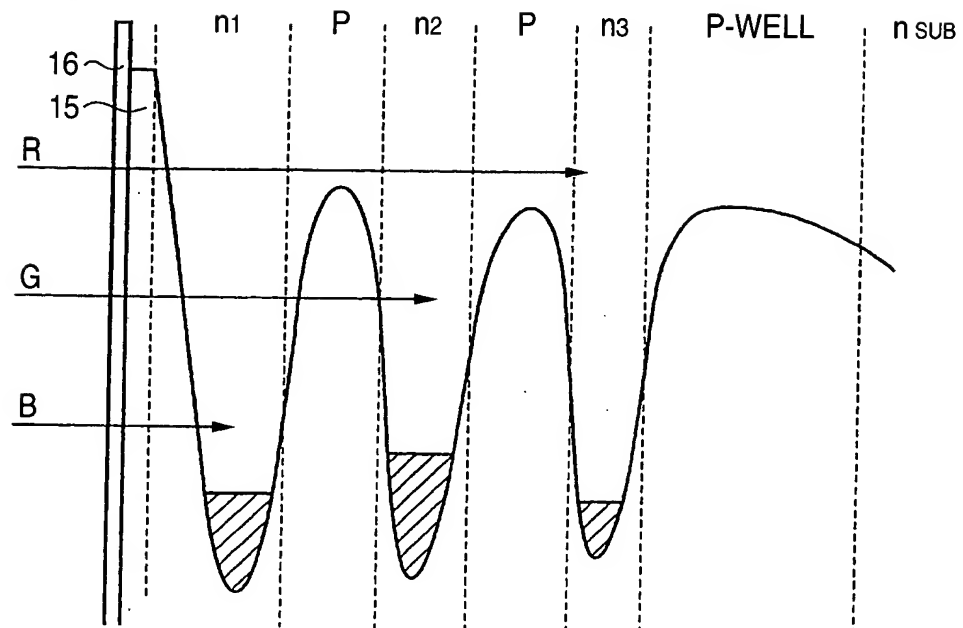


FIG. 8



POTENTIAL IN DEPTHWISE DIRECTION OF
SUBSTRATE AND DISTANCE AT WHICH
WAVELENGTH OF INCIDENT LIGHT HAS ARRIVED

FIG. 9

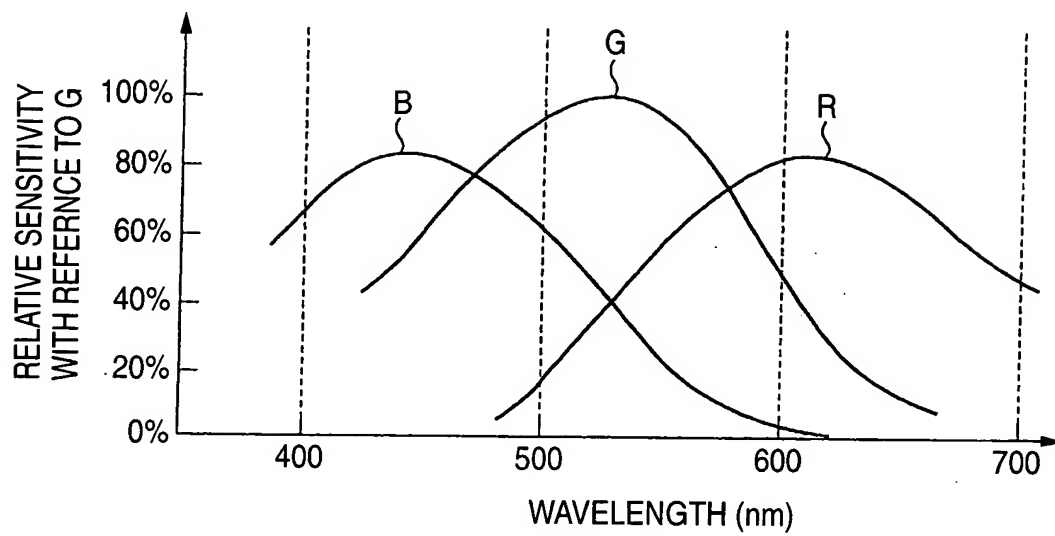


FIG. 10

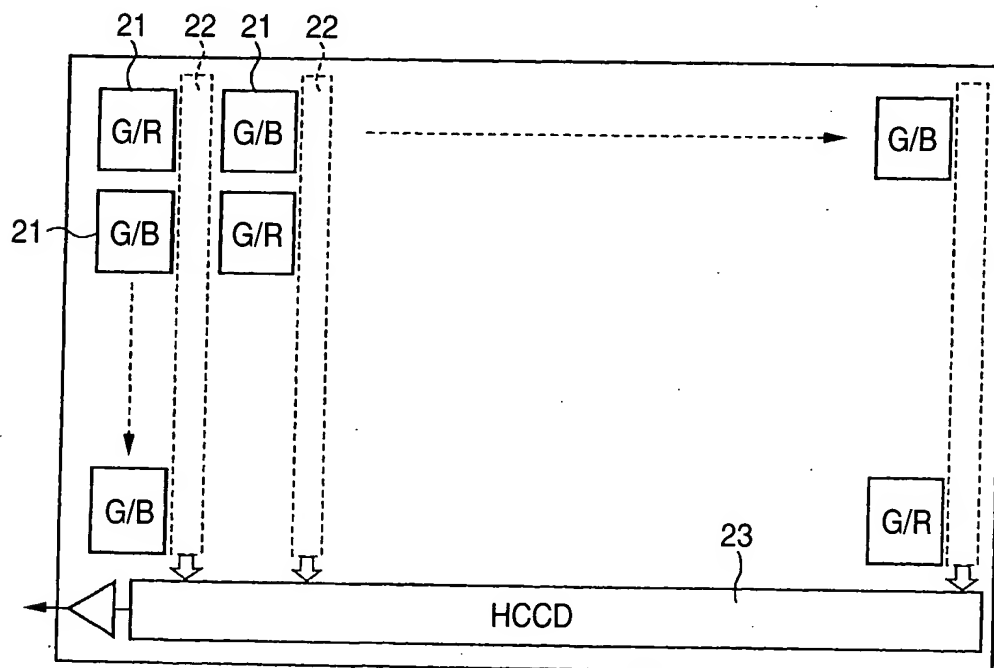


FIG. 11

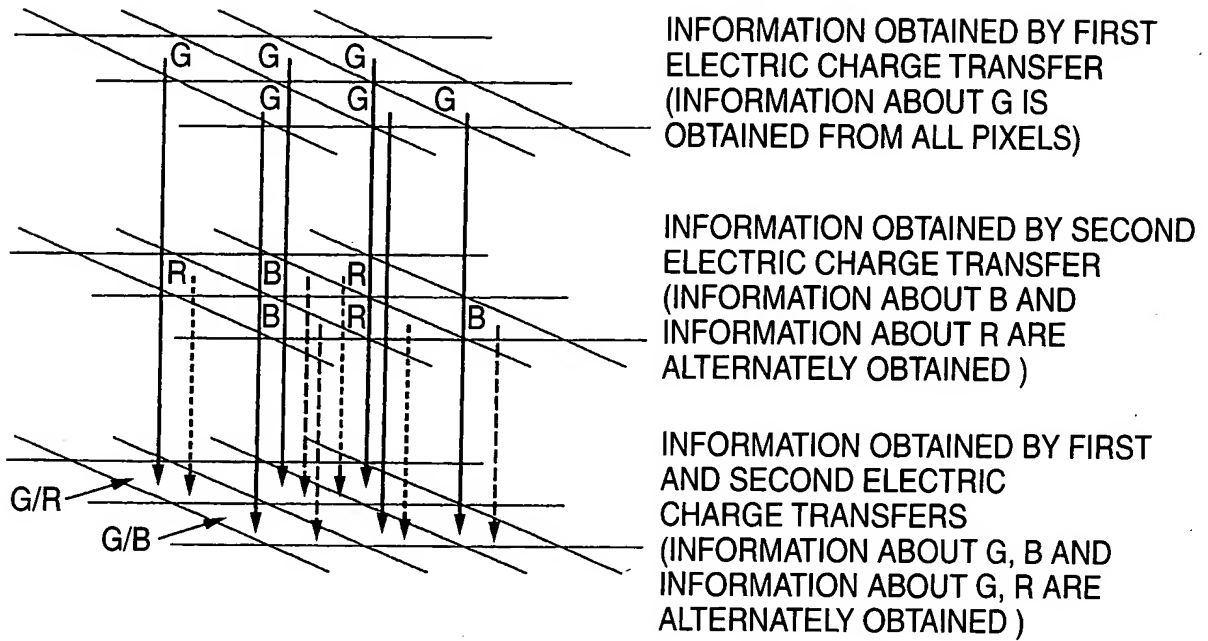


FIG. 12

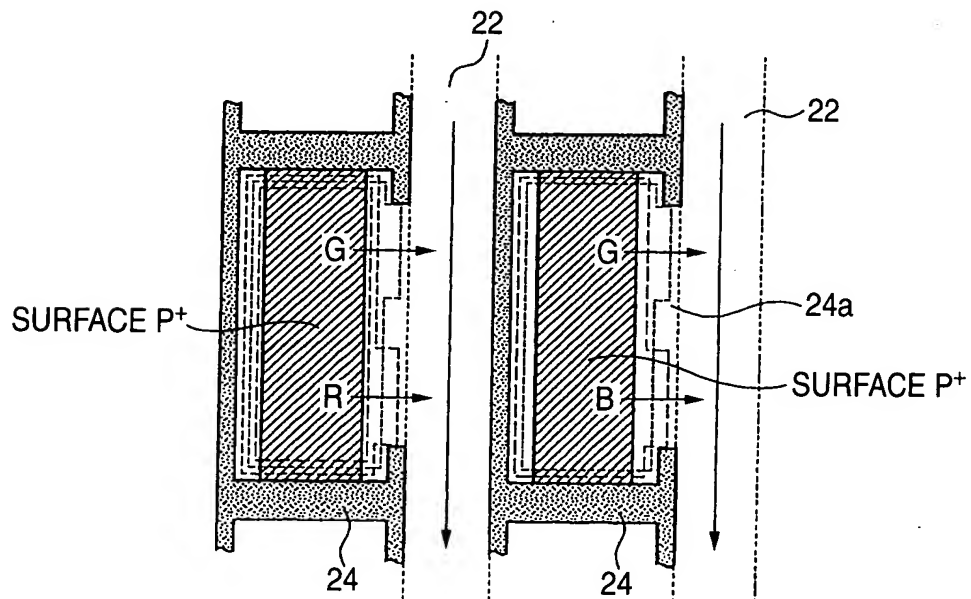


FIG. 13

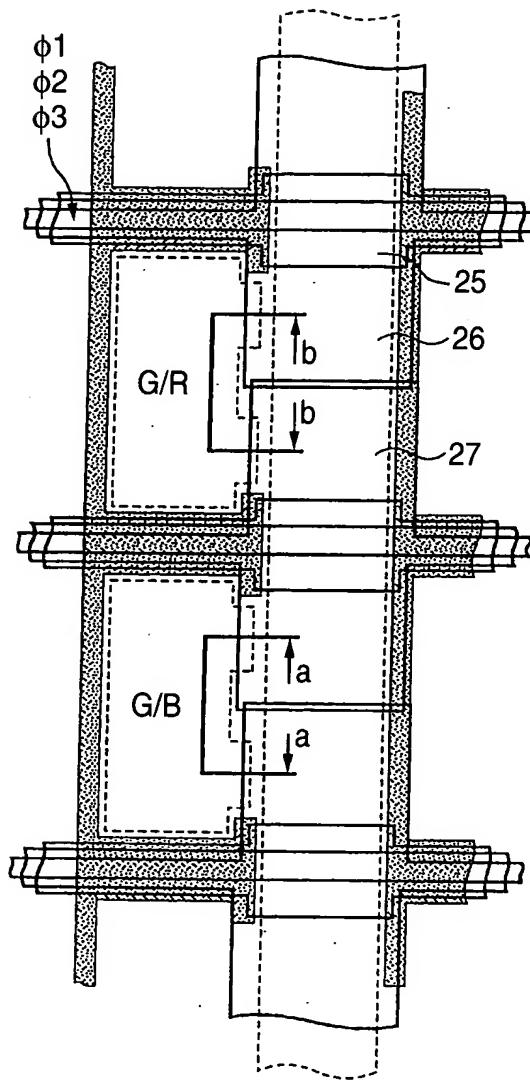


FIG. 15A

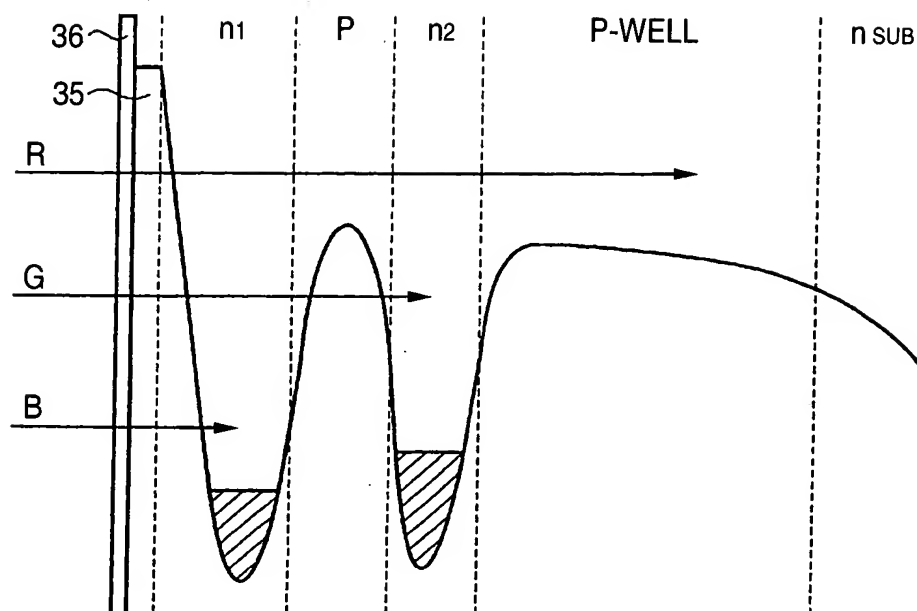


FIG. 15B

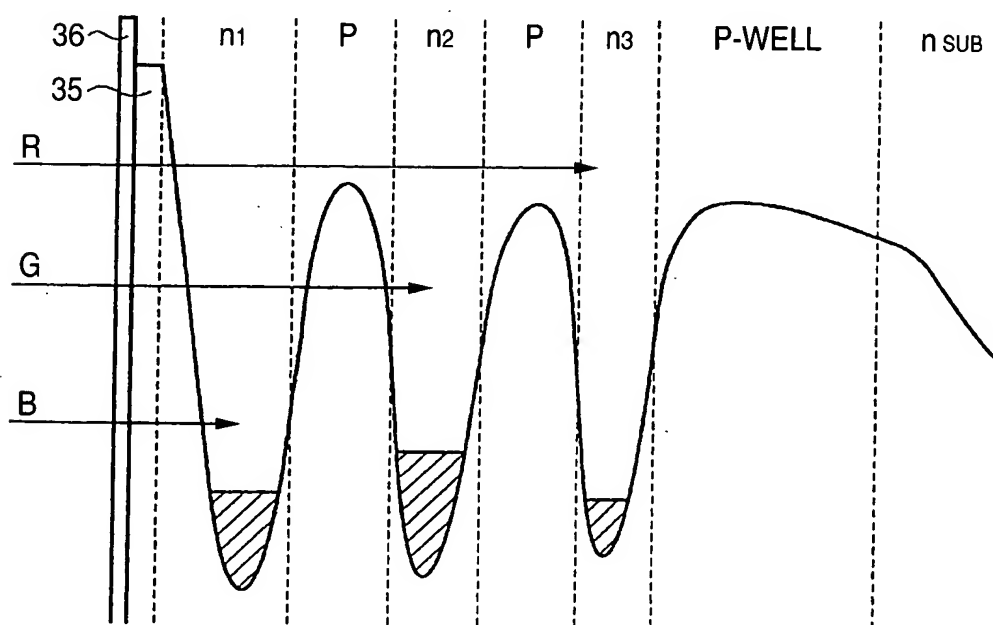


FIG. 16

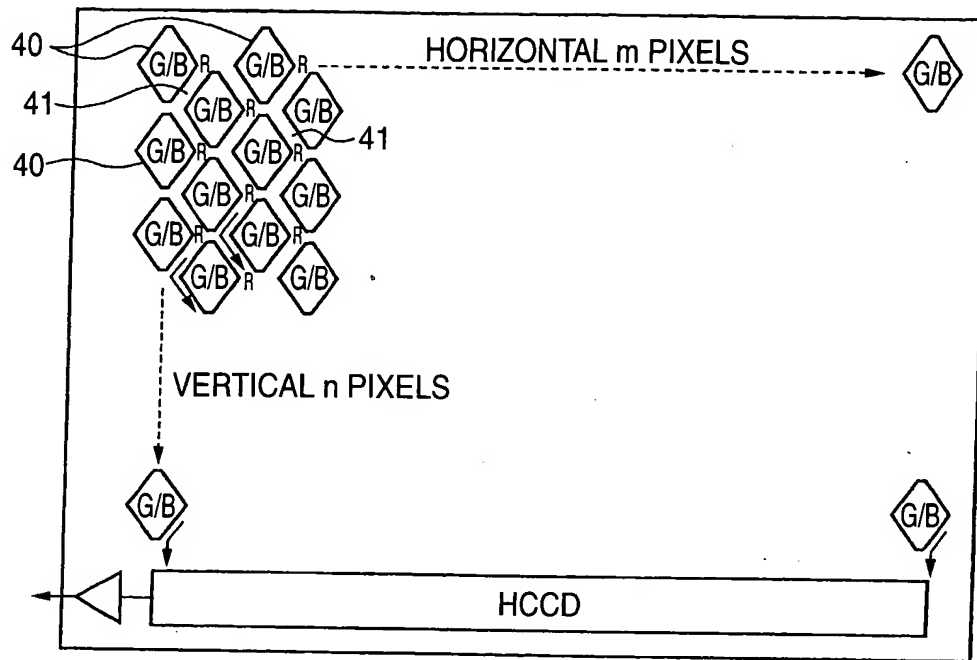
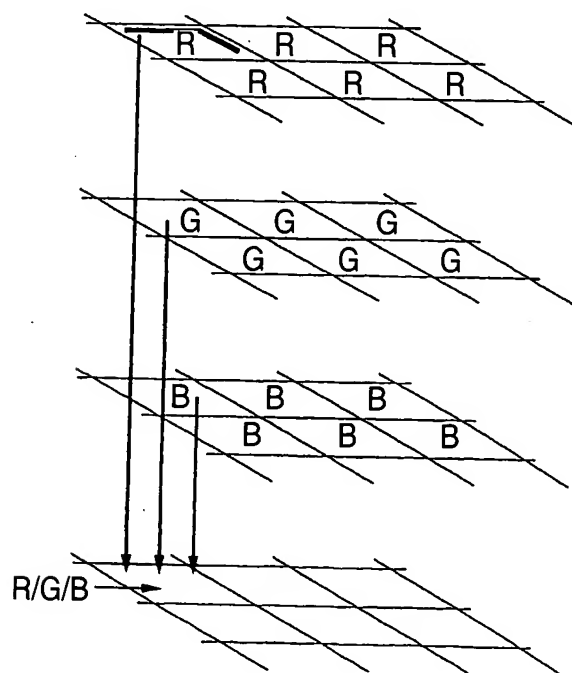


FIG. 17



INFORMATION OBTAINED BY
FIRST CHARGE TRANSFER
INFORMATION OF $m \times n$ PIXELS
ABOUT R OF VCCD SECTION

INFORMATION OBTAINED BY
SECOND CHARGE TRANSFER
INFORMATION OF
 $m \times n$ PIXELS ABOUT G

INFORMATION OBTAINED BY
THIRD CHARGE TRANSFER
INFORMATION OF
 $m \times n$ PIXELS ABOUT B

FINALLY-OBTAINED
IMAGE INFORMATION
INFORMATION OF
(B, G, R) $m \times n$ PIXELS

FIG. 18

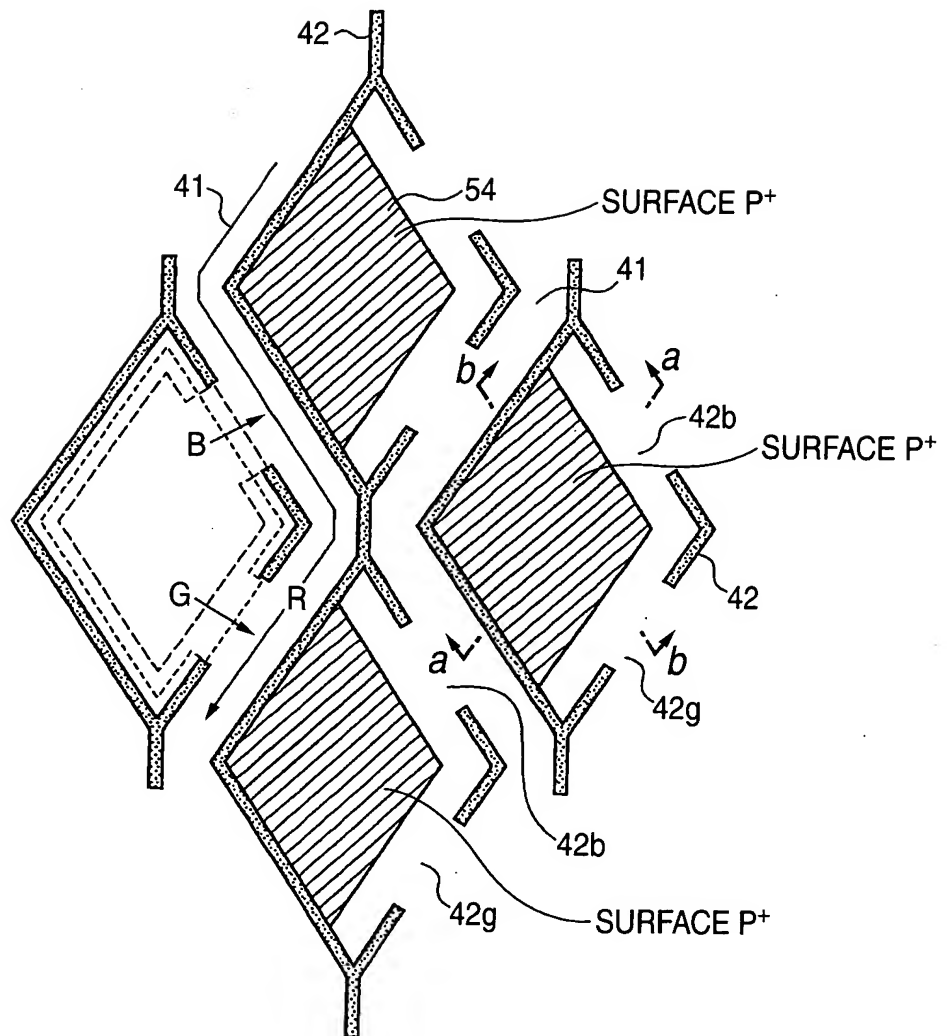


FIG. 19A

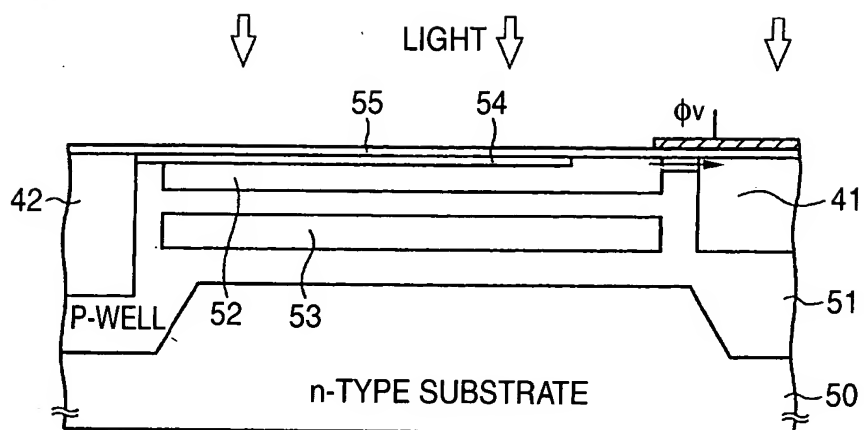


FIG. 19B

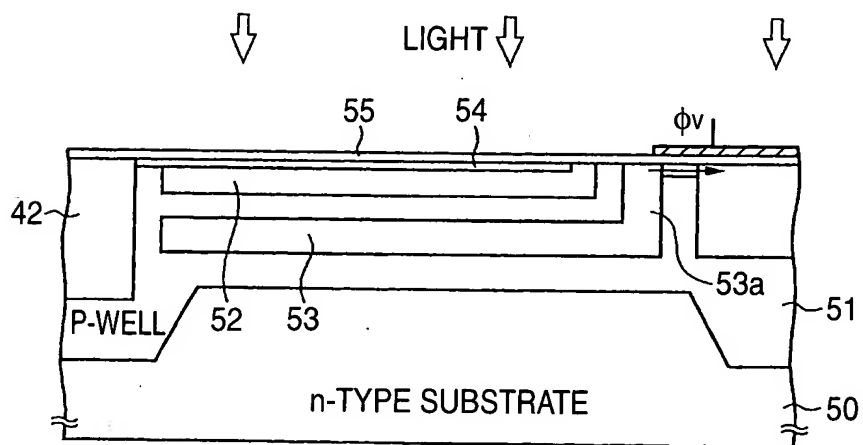


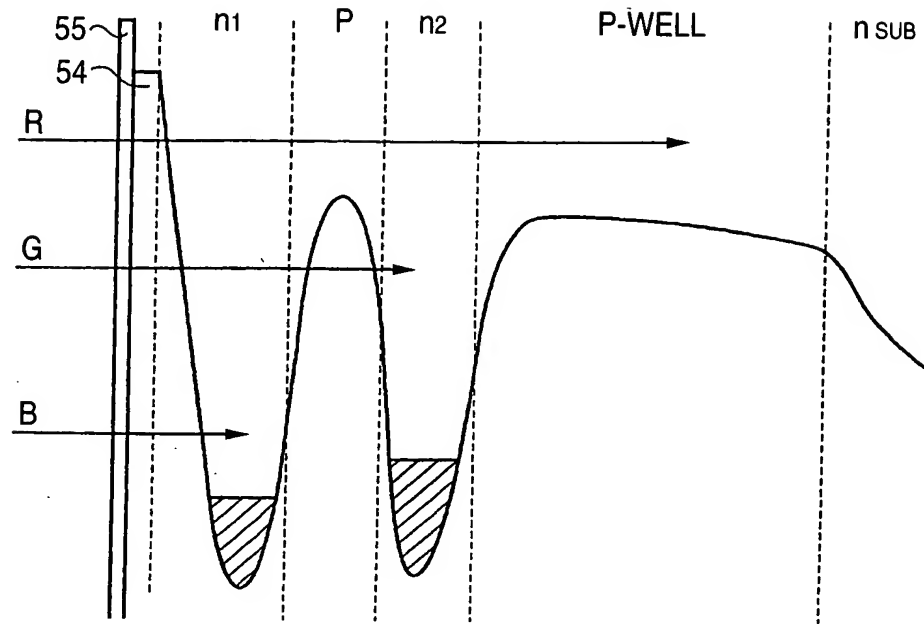
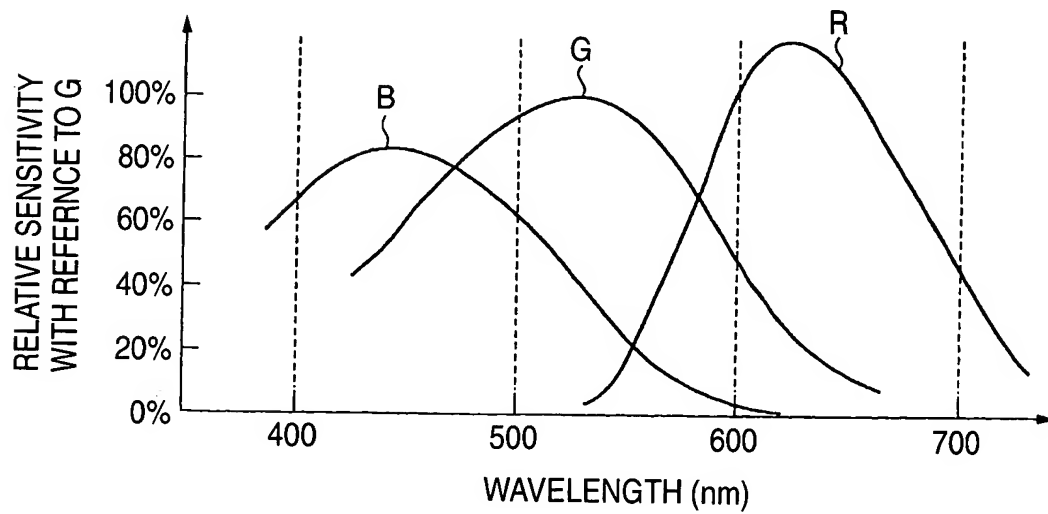
FIG. 20**FIG. 21**

FIG. 22

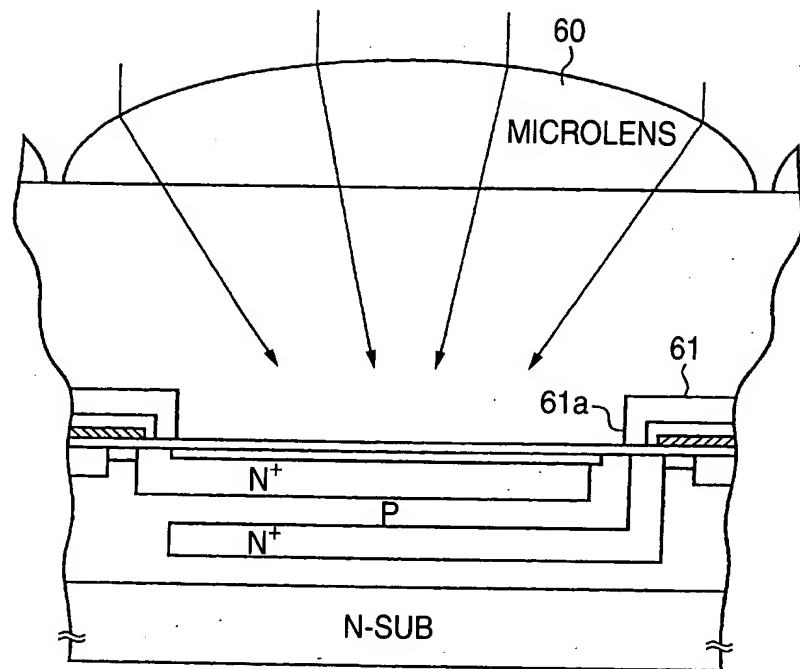


FIG. 23

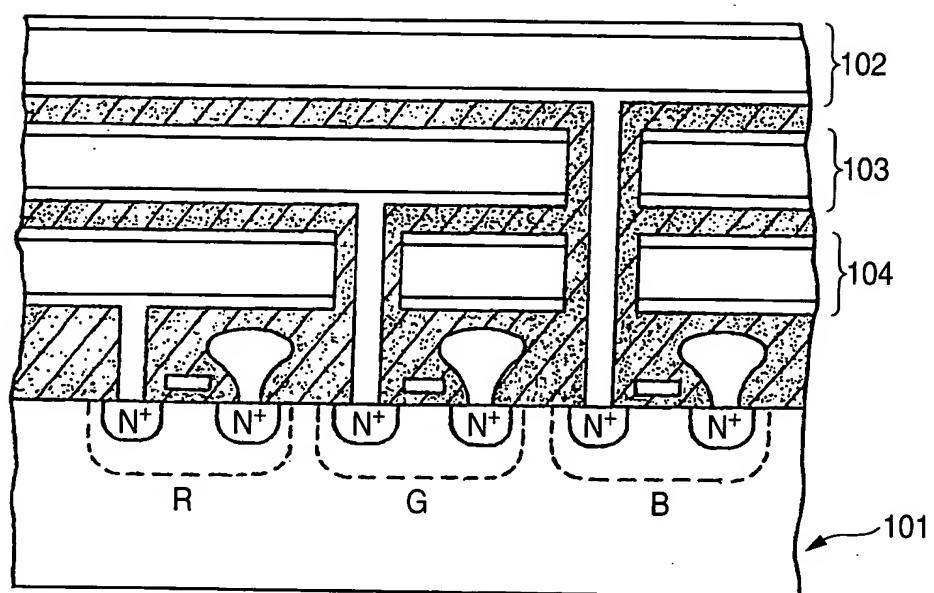


FIG. 24A

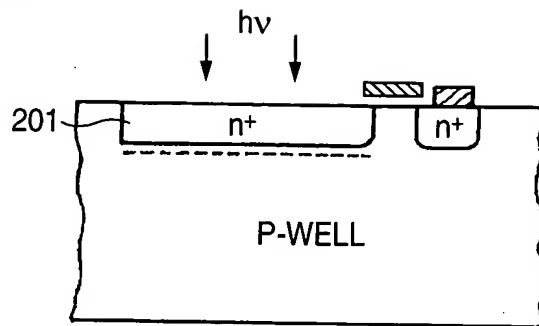


FIG. 24B

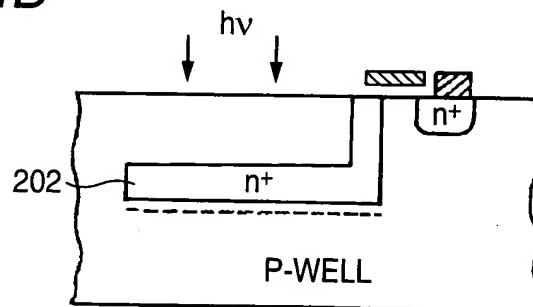


FIG. 24C

